

**Virginia Department of Conservation and Recreation  
Public Hearing on Proposed Impounding Structure Regulations  
(4 VAC 50-20-10 et seq.)**

**October 4, 2007 in Roanoke, Virginia**

**Meeting Officer:** David C. Dowling  
Director of Policy, Planning and Budget  
Department of Conservation and Recreation

**Opening:**

**Mr. Dowling:** Good Evening, I would like to call this public hearing on the Virginia Soil and Water Conservation Board's proposed Impounding Structure Regulations to order. I am David Dowling, Director of Policy, Planning and Budget for the Department of Conservation and Recreation. I will be serving as the meeting officer this evening. I welcome you to this hearing.

I would like to thank the City of Roanoke for allowing us to use this facility.

***Introduce DCR Staff assisting with the meeting.***

With me tonight I have Bill Browning, Division Director for DCR's Division of Dam Safety and Floodplain Management. Also with me are Jim Robinson, DCR's Dam Safety Program Manager, and Michael Fletcher, DCR's Board and Constituent Services Liaison. Michael will be audio taping our meeting and developing a set of minutes of the comments received tonight. Other DCR staff members with me this evening is Ryan Brown, our Policy and Planning Assistant Director, who will serve as our technical presenter this evening, and Christine Watlington, our Policy and Budget Analyst. Tom Roberts, Regional Dam Safety Engineer is here in the audience.

I hope that all of you have registered on our attendance list. If not, please do so. Those wishing to speak should note that on the attendance list. Please also make sure that your contact information is legible and complete, as we will be utilizing it to keep you informed on the status of the regulatory action.

**Purpose of the public hearing:**

The purpose of this hearing is to receive input from citizens on the Board's proposed Virginia Impounding Structure Regulations during the 60-day public comment period, which started on August 20, and ends on October 19, 2007. These regulations not only impact dam owners but also impact the growing number of Virginians living downstream from dams.

The Department used the participatory approach to develop the proposal. Following the publication of the Notice of Intended Regulatory Action (NOIRA) regarding these regulations in December of 2005 and the public comment period on the NOIRA, the Department formed a Technical Advisory Committee (TAC) to assist in the development of the proposed regulations. The 28-member TAC met seven times between the months of May and October 2006. Following the completion of the TAC's work, the Soil and Water Conservation Board proposed these regulations at its meeting held on November 15, 2006. Copies of the proposed regulations are located on the table near the attendance list.

This concludes my introductory remarks. I would like to introduce Ryan Brown, DCR's Policy and Planning Assistant Director, who will explain in more detail what the proposed regulations do.

**Mr. Brown:** Thank you Mr. Dowling.

The Board's regulatory proposal has been developed to support and advance the goals of the Virginia Dam Safety Act, contained in § 10.1-604 et seq. of the Code of Virginia, which gives the Virginia Soil and Water Conservation Board the authority to adopt regulations to protect the health, safety, and welfare of citizens through ensuring that all regulated dams are properly and safely constructed, maintained, and operated.

Key provisions of this proposed regulatory action include the following:

- 1) A revision of the dam classification system found in 4VAC50-20-40 from four categories (Class I, II, III, and IV) to three hazard potential classifications (High, Significant, and Low). This conforms the classification categories contained in the regulations to those used by federal agencies and many other states.
- 2) A specification that the Spillway Design Flood requirements found in Table 1 of 4VAC50-20-50 are applicable to all dams, and not just those constructed after July of 1982, as the currently-effective regulations state. In addition, Table 1 is revised to:
  - Reflect the revised dam classifications.
  - Update spillway design requirements to enhance public safety and to move towards federal standards.
  - Eliminate spillway design flood ranges within categories, which may result in inconsistency in application.
  - Require that the spillway of all high-hazard dams be engineered to pass the full Probable Maximum Flood.
  - Specify minimum thresholds for incremental damage assessments, which may be used to lower the required spillway design floods for dams.
- 3) The creation of a new section, 4VAC50-20-52, that allows for the potential reduction of the spillway design flood requirement through an incremental damage assessment

where the breach of a dam would not significantly worsen downstream flooding. This had previously been applicable only to dams constructed prior to July 1982, but now would be applicable to all eligible dams.

4) The creation of a new section, 4VAC50-20-54, that sets out dam break inundation zone mapping requirements for all dams to be used in hazard potential classification determinations and in Emergency Action Plans for High and Significant Hazard Potential dams.

5) A specification in a new section, 4VAC50-20-58, that for each Operation and Maintenance certificate (Regular or Conditional) issued, the impounding structure owner shall send a copy of the certificate to the appropriate local government(s) with planning and zoning responsibilities.

6) The development of language in a new section, 4VAC50-20-125, establishing a delayed effective date for certain dams determined to have an adequate spillway capacity prior to the effective date of these regulations but that would require modifications due to changes in the regulations. This delayed effective date section would allow upgrades to these dams to be phased in over an 8 to 11 year period.

8) The creation of a new section, 4VAC50-20-175, expanding emergency action plan requirements for High and Significant Hazard Potential dams. The plan would be developed and periodically tested in coordination with all entities, jurisdictions, and agencies that would be affected by a dam failure or that have statutory responsibilities for warning, evacuation, and post-flood actions.

9) The creation of a new section, 4VAC50-20-177, establishing emergency preparedness plan requirements for each Low Hazard Potential dam. These plans contain lesser requirements than the Emergency Action Plans required for High and Significant Hazard Potential dams due to the reduced threat posed by Low Hazard Potential dams.

10) The creation of a series of new sections that establish fees for the administration of the dam safety program. These include the following new sections:

- 4VAC 50-20-340 Authority to establish fees
- 4VAC 50-20-350 Fee Submittal Procedures
- 4VAC 50-20-360 Fee Exemptions
- 4VAC 50-20-370 Construction Permit Application Fees
- 4VAC 50-20-380 Regular Operation and Maintenance Certificate Application Fees
- 4VAC 50-20-390 Conditional Operation and Maintenance Certificate Application Fees
- 4VAC 50-20-400 Incremental Damage Analysis Review Fees

11) The removal of all forms currently incorporated by reference and incorporation of required elements of the forms into the regulations. Recommended forms will still be available. This will allow for the modification and improvement of forms without going through a lengthy regulatory action.

12) The provision of definitions or modifications to definitions in section 4VAC50-20-30 for the terms “Agricultural purpose”, “Agricultural purpose dam”, “Alteration”, “Construction”, “Dam break inundation zone”, “Department”, “Drill”, “Emergency Action Plan or EAP”, “Emergency Action Plan Exercise”, “Emergency Preparedness Plan”, “Freeboard”, “Height”, “Spillway”, “Stage I condition”, “Stage II condition”, “Stage III condition”, “Sunny Day Dam Failure”, “Tabletop Exercise”, and “Watercourse”.

13) Updates necessary to reorganize, clarify, and expand multiple sections related to permits and the repealing of sections that are incorporated into the reorganized sections. These updates are included in:

- **4VAC50-20-70** Construction permits.
- **4VAC50-20-80** Alterations permits.
- **4VAC50-20-90** Transfer of permits.
- **4VAC50-20-105** Regular Operation and Maintenance Certificates.
- **4VAC50-20-150** Conditional Operation and Maintenance Certificates.
- **4VAC50-20-155** Extension of Operation and Maintenance Certificates.
- **4VAC50-20-160** Additional operation and maintenance requirements.

14) The creation of a new section, 4VAC50-20-165, stating that dams operated primarily for agricultural purposes which are less than 25 feet in height or which create a maximum impoundment capacity smaller than 100 acre-feet are exempt from the regulations.

15) And finally, updates to section 4VAC50-20-180 related to inspections, section 4VAC50-20-200 related to enforcement, and section 4VAC50-20-220 related to unsafe conditions. These updates reflect changes in the Code of Virginia made during the 2006 General Assembly.

This concludes the summary of key provisions contained in the proposed regulations.

**Mr. Dowling:** Thank you Mr. Brown.

Before we begin receiving testimony on the proposed regulations, I would like to stress that this is an information-gathering meeting. Everyone wishing to speak will be heard (however due to the number of individuals present we ask you to limit your comments to 3-5 minutes and to address information that others may not have already covered). If necessary, we may ask speakers questions concerning their testimony or to request additional information concerning a subject believed to be important to the process in order

to help the clarify and properly capture your comments. Staff will be available after this hearing to take any individual questions you may have.

We will now begin the public comment portion of the hearing. When I call your name, please come to the front and use the microphone. Please state your name and whom you represent. If you have an extra copy of your comments, we will be happy to accept it.

### **Public Comment Portion**

Mr. Dowling called the following individuals to provide comments.

*John Taylor*

I appreciate the opportunity to be here and to make some comments. The purpose as I understand is to let the legislature know what our feelings are and I certainly hope they will take what I have to say to heart. I have a copy of my remarks which I will let you have.

My name is John Taylor; I'm the owner of Dam #02402, the Crab Orchard Creek Reservoir in Bland County.

I had some difficulty finding the reference on the website.

I appreciate the diligent work in progress to update dam regulations and understand and agree with the necessity to provide verifiably safe impoundment structures.

The proposed requirements are ruinous and as outlined would involve additional expenses for me of over \$20,000 in addition to the cost of engineering changes which may be unnecessary.

I have lived and worked in Virginia and owned and operated my dam for over 20 years, always I believe responsibly and fully compliant with all regulations. I am now retired and receive Social Security disability.

I have recently completed and filed:

- 1) EAP with inundation map
- 2) Engineer's report
- 3) O&M Permit Application

My dam has, as is documented in the application, a secondary dam in the embankment of I-77, one thousand feet away with a working triple box culvert. Repeated evaluations, Phase I and Phase II reports have classified hazard at Class II or significant risk in new classification.

I have applied for the revision of the spillway to the full PMF. Mr. Roberts this evening tells me they have approved that condition which I am very grateful for.

If hydrological surveys are mandated, this will cost an additional \$16,417 according to your data; engineers' fees for agreeing with EAP \$3,125; and license applications \$1,000 with much additional if temporary permits are required.

If it's necessary, and it appears that it may be to implement these application fees, if you have a situation where a person is granted a temporary permit and is charged \$1,000 for that and it would take however many years he will be subject to fees on a yearly basis. I would like you to consider that, if you do put in an application fee, and if it's a good application and it progresses satisfactorily that it would be a one-time fee, rather than implemented on a yearly basis.

If hydrological surveys are mandated for alterations of spillways this will cost presumably another \$16,417 in addition to the projected cost outlined in my O&M application.

We have determined in our Phase II report performed by Professor Yusef at VPI what the PMF is and I have requested the Board's permission to provide this in the emergency spillway.

I would request that while maintaining the requirement for demonstrating safe structures that the requirement for costly completion models not be mandated, but used only when required and that language be included to encourage the Board to consider less costly alternatives when these are available.

The classification of the Class I or the Class II or the significant situation seems to unreasonably propose regulations that again are going to require computer generated information. I think in many cases less costly alternatives are available.

If computer generated information is required, that is going to exclude some of the "normal" professional engineers listed on the department's schedule as far as being available to help dam owners. The only people with access to these extremely expensive programs are people like Thompson and Litton and Dewberry and Davis.

Regarding the inundation zone, in my case there was a previous dam located in Bland in exactly the same location and it broke in 1957, before I-77 was put in. So we have exact information, tangible information on exactly where the inundation zone is. It was never required before, but in this case together the emergency coordinator and I developed an inundation map that is provided to the public authority.

This is specific; this is exactly what happened when the dam did break. Surely this is an awful lot better than a computer generate information. I would hope that would not be necessary.

I would hope that the legislature would consider some of these points.

**Mr. Dowling:** Thank you Mr. Taylor.

*Daniel Osborne*

My name is Daniel Osborne. I'm representing Camp Jacob, owners of the White Oak Creek dam in Dickinson County

Camp Jacob is a Christian-owned, non-profit camp and at this time is a small camp and is barely able to make budget as it is. I wish to comment regarding the letter that had the comments and the committee's responses to the comments. I'm looking at page 6.

I had commented on this before, about the grandfathering of existing dams and modifications that are applicable to even the older dams.

Camp Jacob has owned this dam and has been in existence for 23 years. The dam itself has been there for 40 years. It was constructed in part by the Army Corps of Engineers. Up to this point it has been considered a relatively safe dam.

The response to the comments says something about the fact that we cannot allow preexisting dams to affect our determination of what is safe and what is not.

In my opinion we are changing our definition of safe. Just because of that change in definition, it doesn't seem right to me that we would require something that was once safe to upgrade just because we changed our opinion on what is safe. The dam hasn't changed.

This move by the regulations could put us out of business or at least eliminate the use of the lake. That has been a big part of helping us spreading the gospel through our camp programs.

The next comment under the grandfathering had to do with providing complete funding. To me that would be the appropriate action if you are going to impose requirements on existing dams.

That should be coordinated with the providing of funds. I noticed you had the information about the providing of the land and the grants. A loan would not be satisfactory for our condition. A grant would be acceptable in my opinion.

I hope the Board and all the legislators will consider the fact that there is at least one small dam owner that they can put out of business due to a change in their definition of safe.

**Mr. Dowling:** One point of clarification. There have been several references to the legislature. You are commenting to the Virginia Department of Conservation and Recreation. We will make recommendations to the Virginia Soil and Water Conservation Board that has the authority for these regulations.

*Alan Nicholas*

Yes, I am Alan Nicholas, representing Windsor Lake Corporation here in Roanoke, Virginia.

First of all, your website can be found after a significant amount of work. After 72 pages one would need an attorney who is well versed in legal language to determine what is and what was.

What I've gathered from what you've put together is that you've sort of removed the classifications to different standard. Right now they are high, significant and low hazard, which I understand and that makes sense.

In so doing, you have high hazard \$1500 per year, line 1729 in the Fees.

If my house is worth \$50,000 the City taxes me on the value of a \$50,000 home. If I have a 72-acre lake you would charge me \$1,500 and Lake of the Woods that might have \$500,000 is \$1,500.

I don't care about this fee, but this applies all over the place. Seems like in moving your categories you've put everybody into a category. If I'm Lake of the Woods, that's chump change but if I have five people then I'm getting hurt.

By the way, I applaud you on some of the things that work out for everybody. But you've lumped the fees in such a way and some of the categories that what happens is that the smaller dam owners are getting caught up in ways that are not tolerable to manage, while for bigger ones it's not a big deal. Whether it's dollars or regulations or numbers of years or inspections or whatever.

I'd urge you if nothing else to look at a second tier. That tier would be not whether it is high or low hazard, but realistically about the size of the dam itself.

We live in the City. The City allows people to build homes downstream. We would love to go down there and tell them that "if you build this thing and we kill you that's not our problem," but we we're not going to do that. We can't stop people from building down there. But we're the ones that are paying for that.

Your prices keep going up like we have an unlimited budget. I'm asking you to look at this overall. I think there needs to be more flexibility size-wise.

There were no additional comments.

**Mr. Dowling:** That completes the list of those individuals who signed up to speak. Are there other individuals who would wish to comment or leave written remarks?

**Closing:**

**Mr. Dowling:** Persons desiring to submit written comments pertaining to this notice and this meeting may do by mail, by the Internet, or by facsimile. Comments should be sent to the Regulatory Coordinator at: Virginia Department of Conservation and Recreation, 203 Governor Street, Suite 302, Richmond, Virginia 23219. Comments also may be submitted electronically to the Regulatory TownHall at <http://townhall.virginia.gov/L/entercomment.cfm?stageid=4047>. Or comments may be faxed to the Regulatory Coordinator at: (804) 786-6141. All written comments must include the name and address of the commenter (e-mail addresses would be appreciated also). In order to be considered, comments must be received by 5:00 PM on October 19, 2007.

A handout is provided on the table outlining the public comment procedures and the dates and locations of the remaining public meetings.

I would like to thank each of you for attending this meeting and providing us with your views and comments. This meeting is now officially closed. Staff will be available afterwards to take any individual questions you may have.

I hope that everyone has a safe trip home.

**Members of the Public Present**

James Baker, Thompson & Litton  
Bob Benninger, Western Virginia Water Authority  
Richard L. Clark, Windsor Lake  
Ryan Fedak, HSMM  
Kevin W. Holt, Windsor Lake  
Mike Loveman, Windsor Lake  
Susan Loveman, Windsor Lake  
Tillman Marshall, Schnabel Engineering  
John Morra, Windsor Lake  
Debbie Moses, Windsor Lake  
Alan Nicholas, Windsor Lake  
James Nowak, Windsor Lake  
Daniel Osborne, Camp Jacob  
Greg Paxson, Schnabel Engineering

Gary C. Pasquarrell, Froehling and Robertson, Inc.  
William Shenk, City of Lynchburg  
John Taylor  
James Witt